

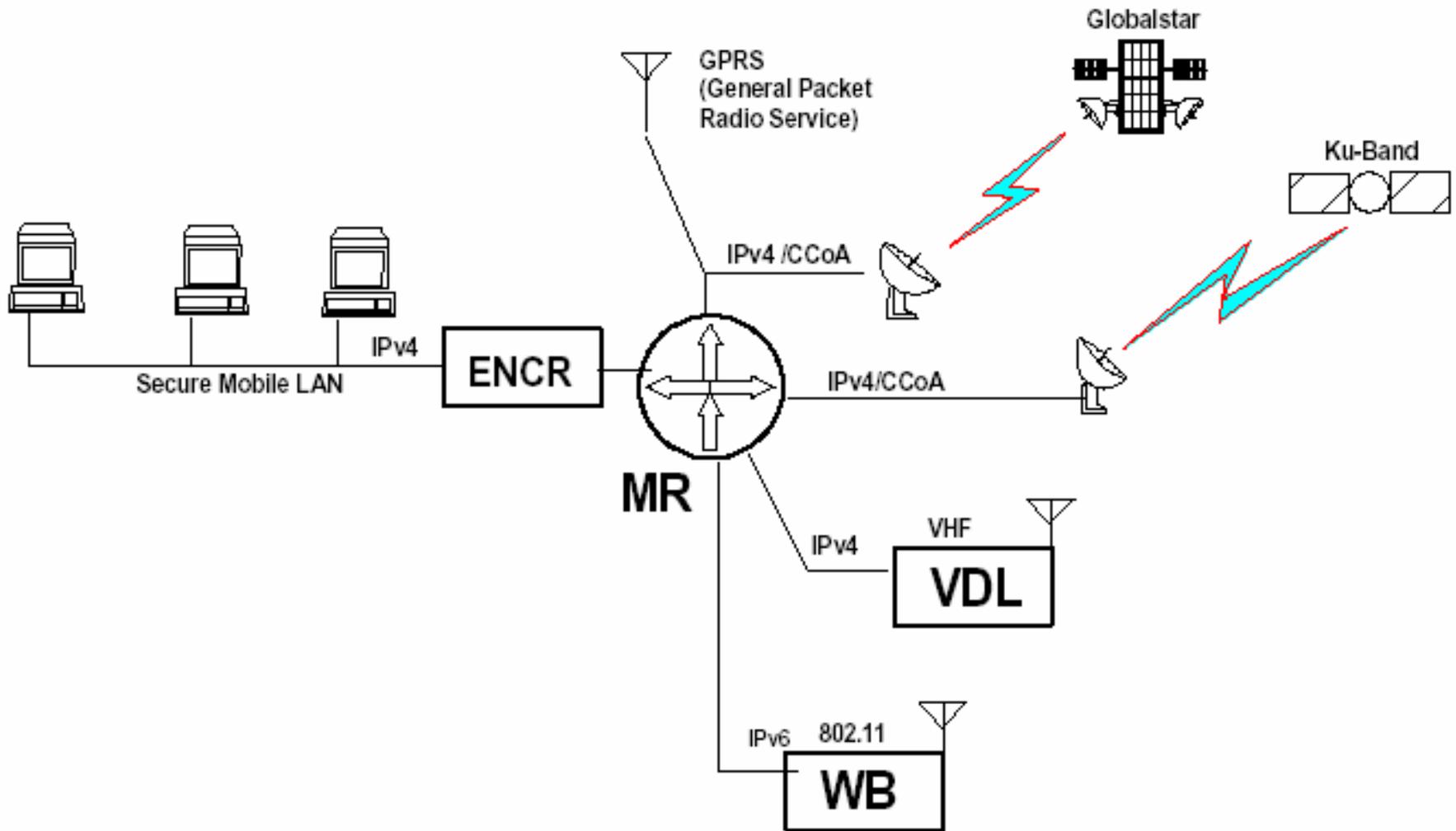
NEMO Experiments

IPv4 & IPv6

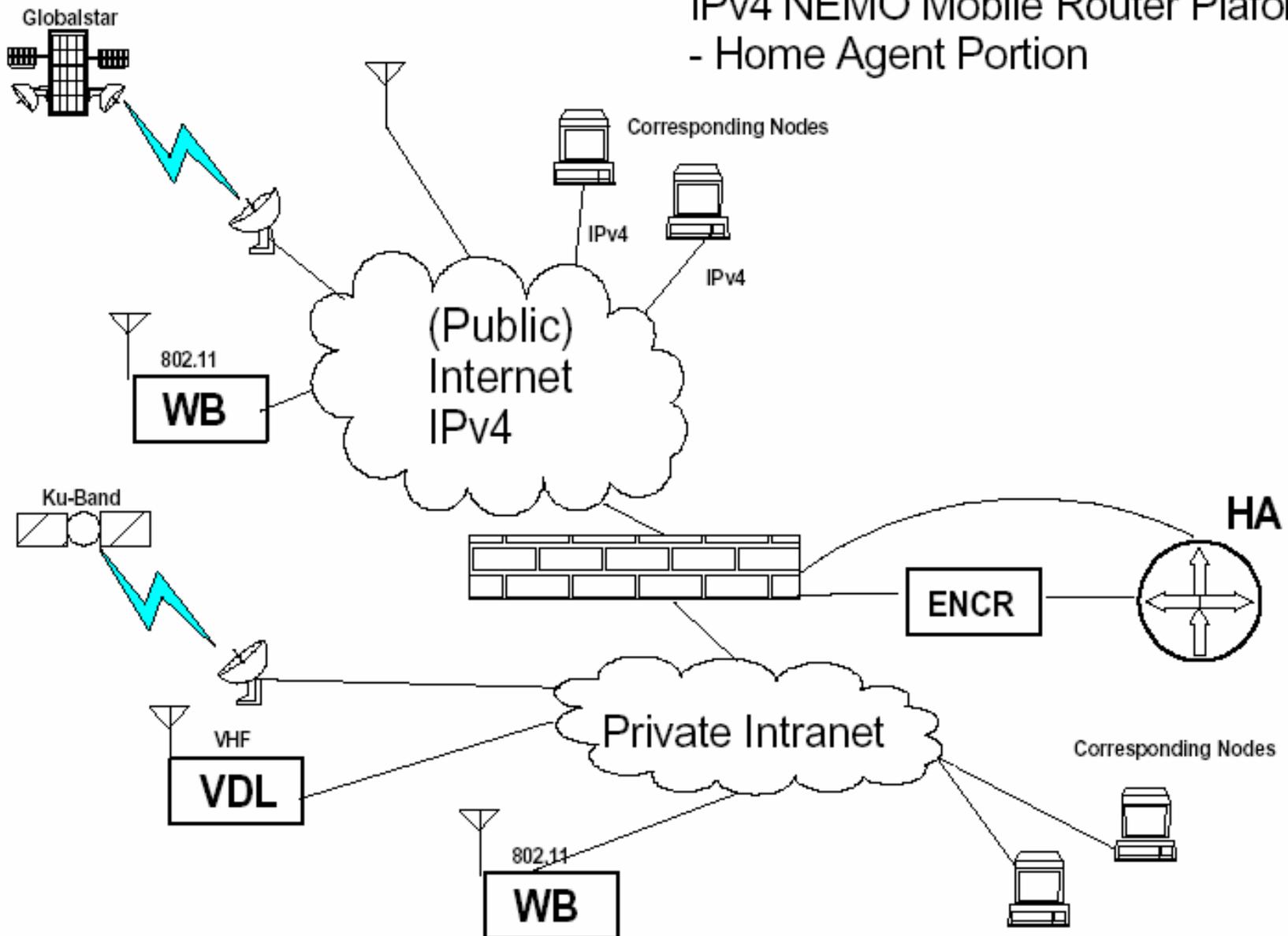
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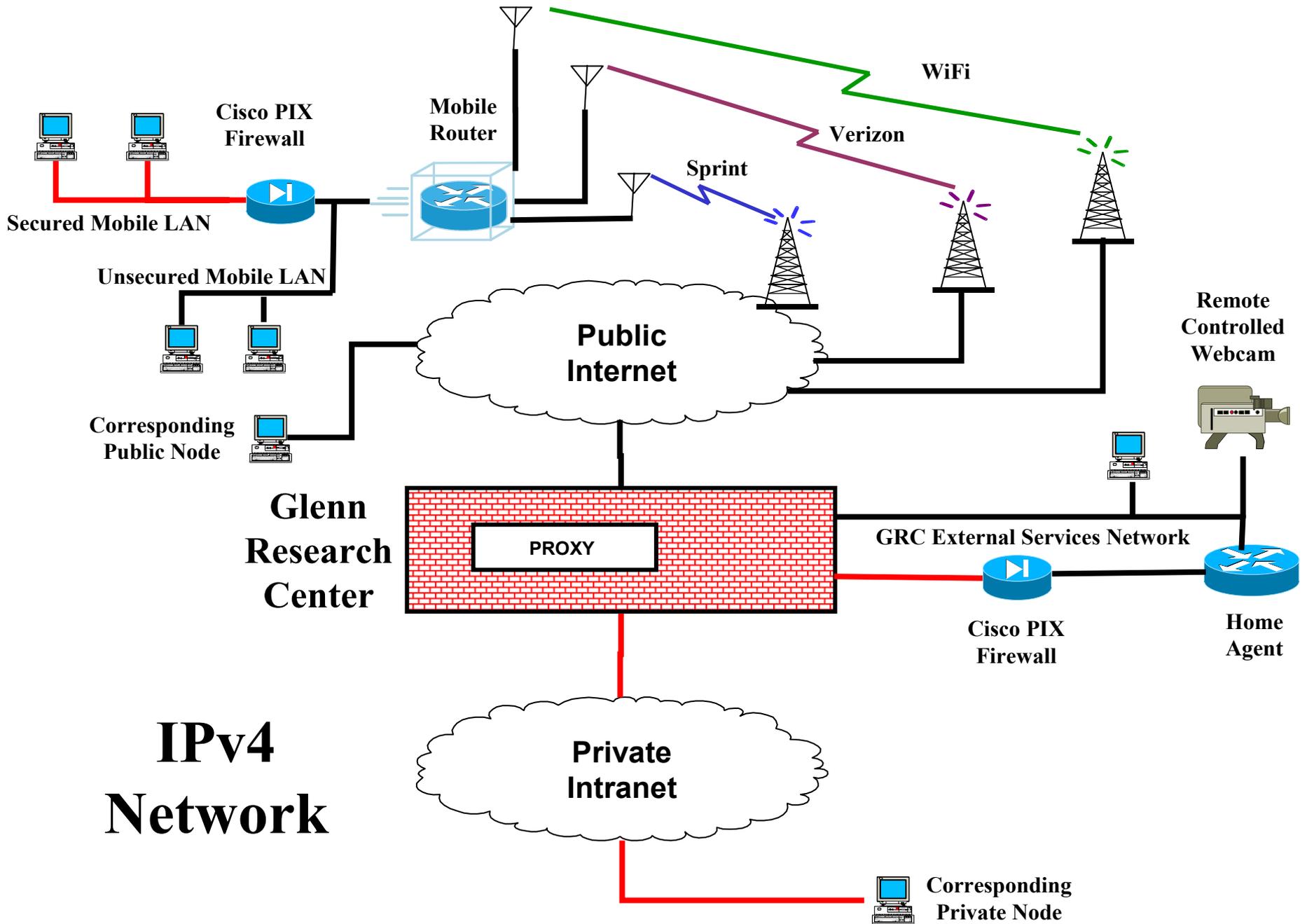
Pick ICNS Demonstration

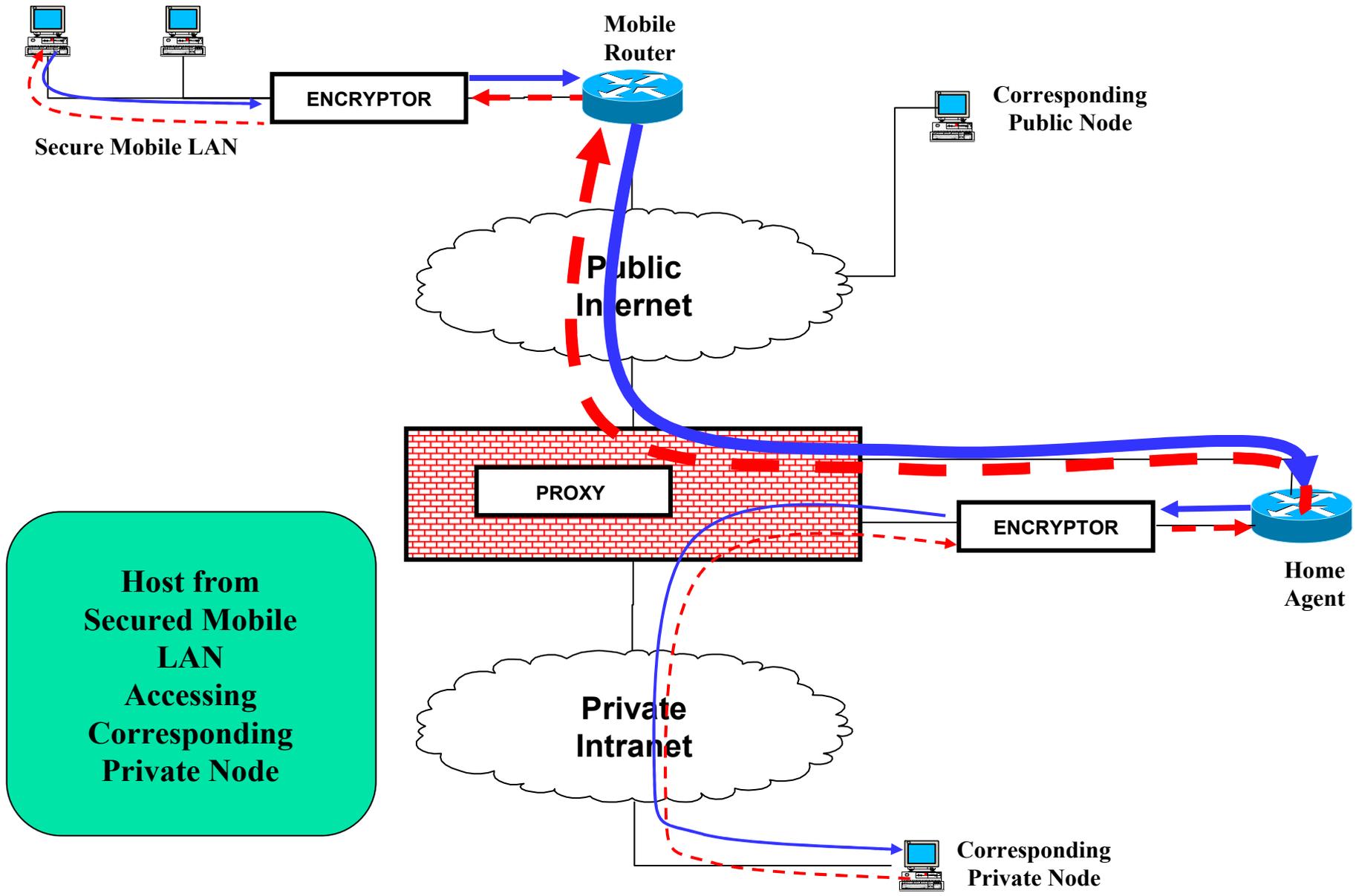
Aeronautical IPv4 NEMO Mobile Router Platform - Mobile Router Portion

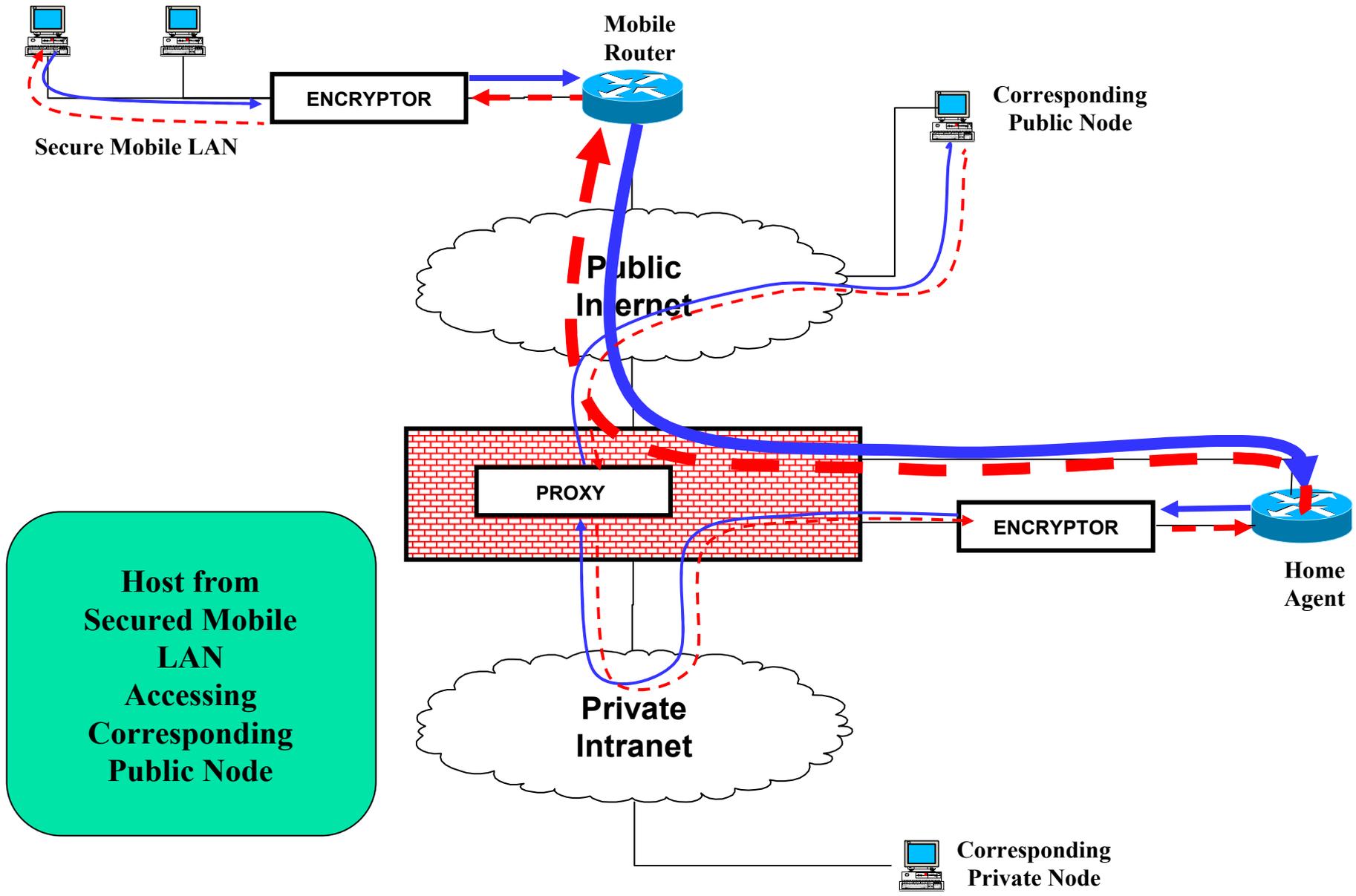


Aeronautical IPv4 NEMO Mobile Router Platform - Home Agent Portion

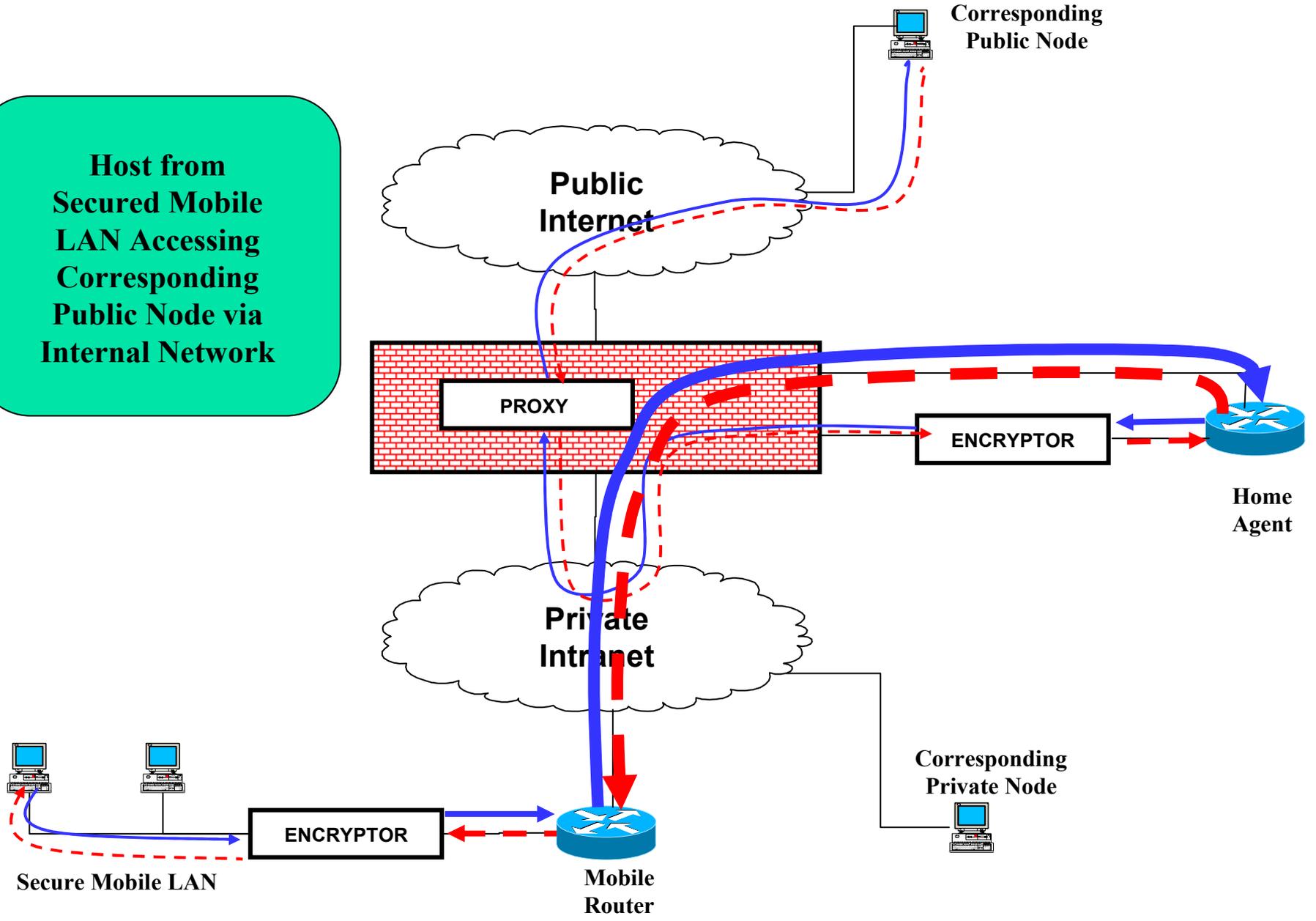




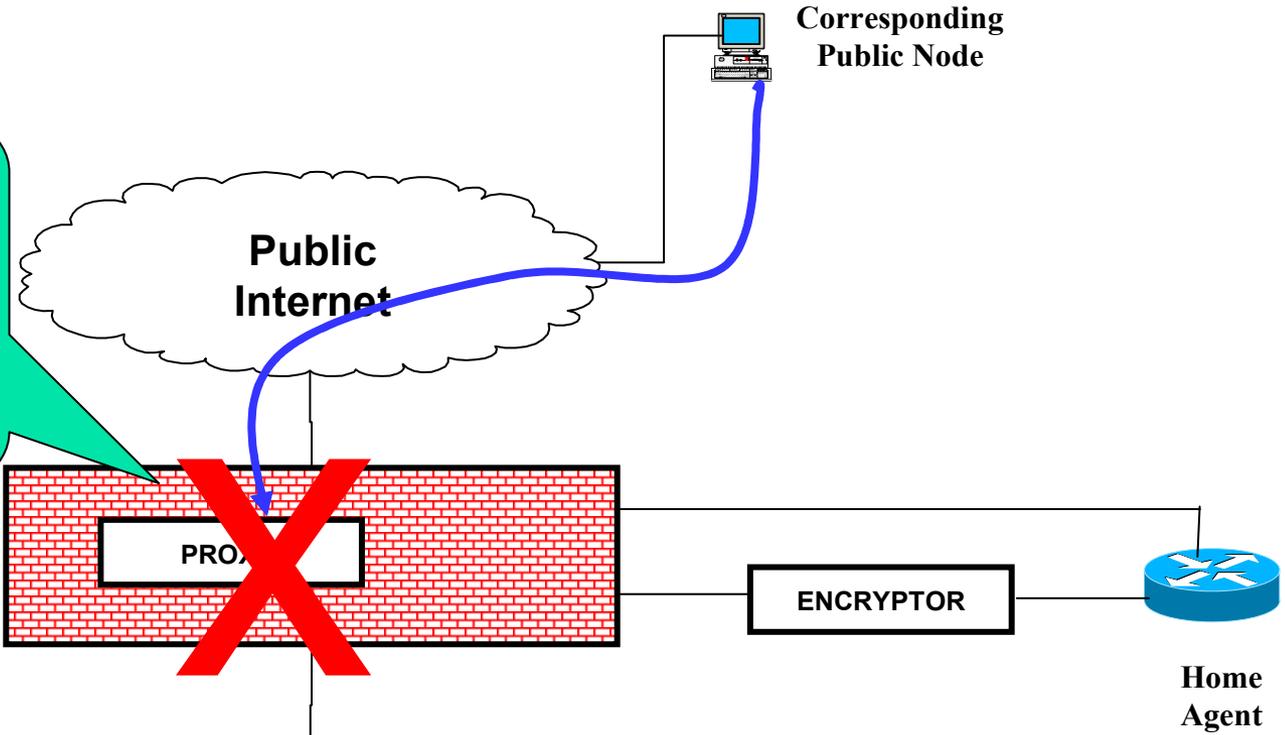




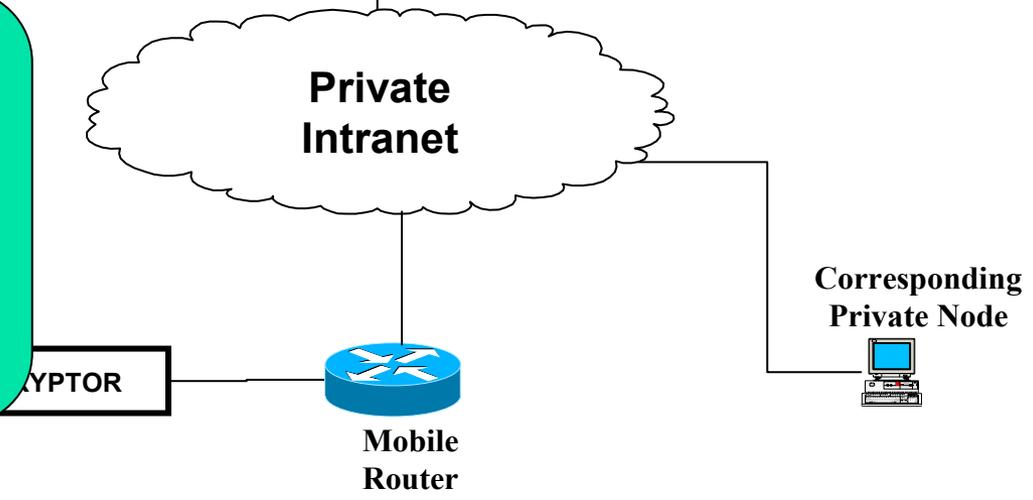
Host from Secured Mobile LAN Accessing Corresponding Public Node via Internal Network



Proxy blocks
Communication
Initiated outside
the Firewall

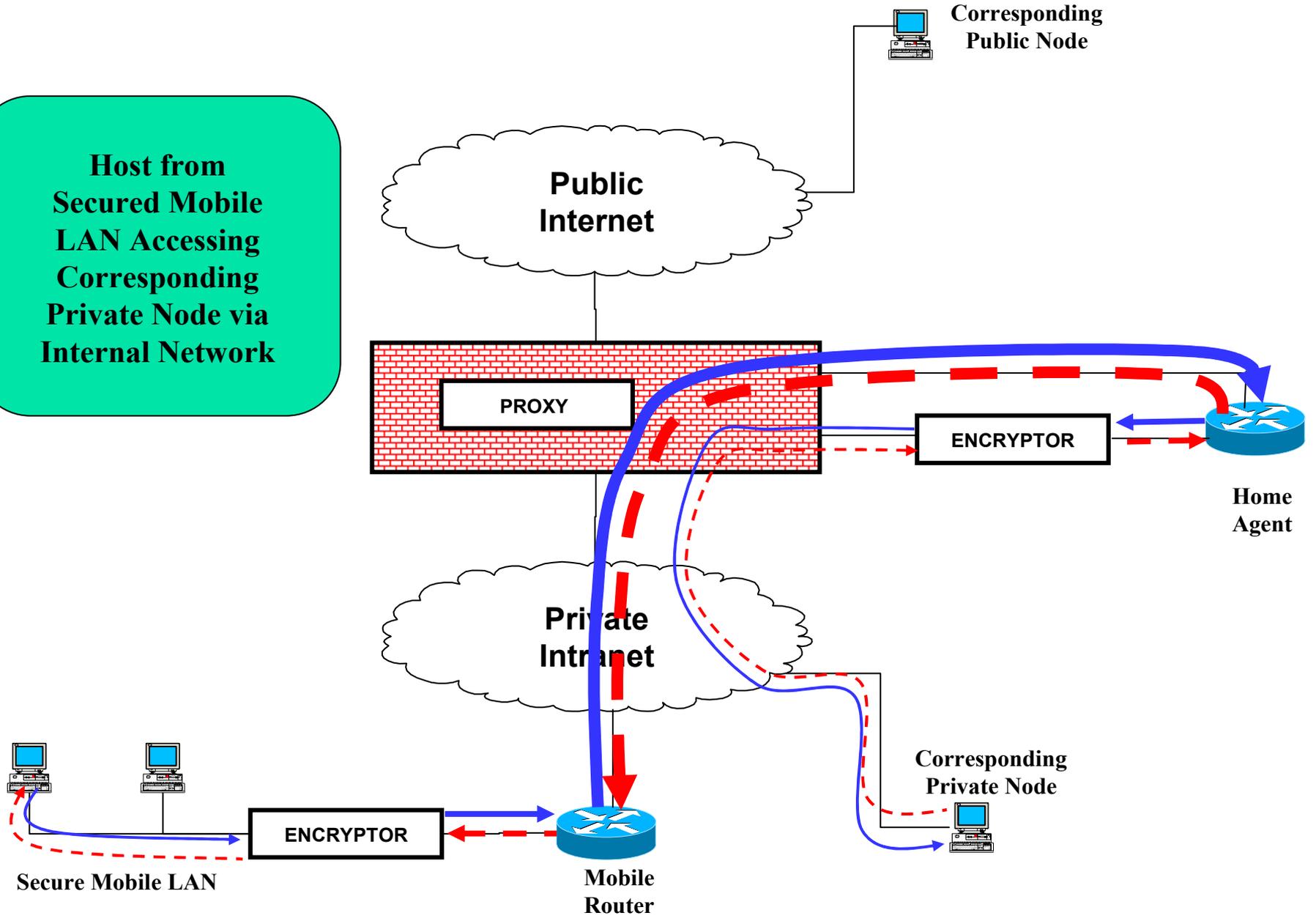


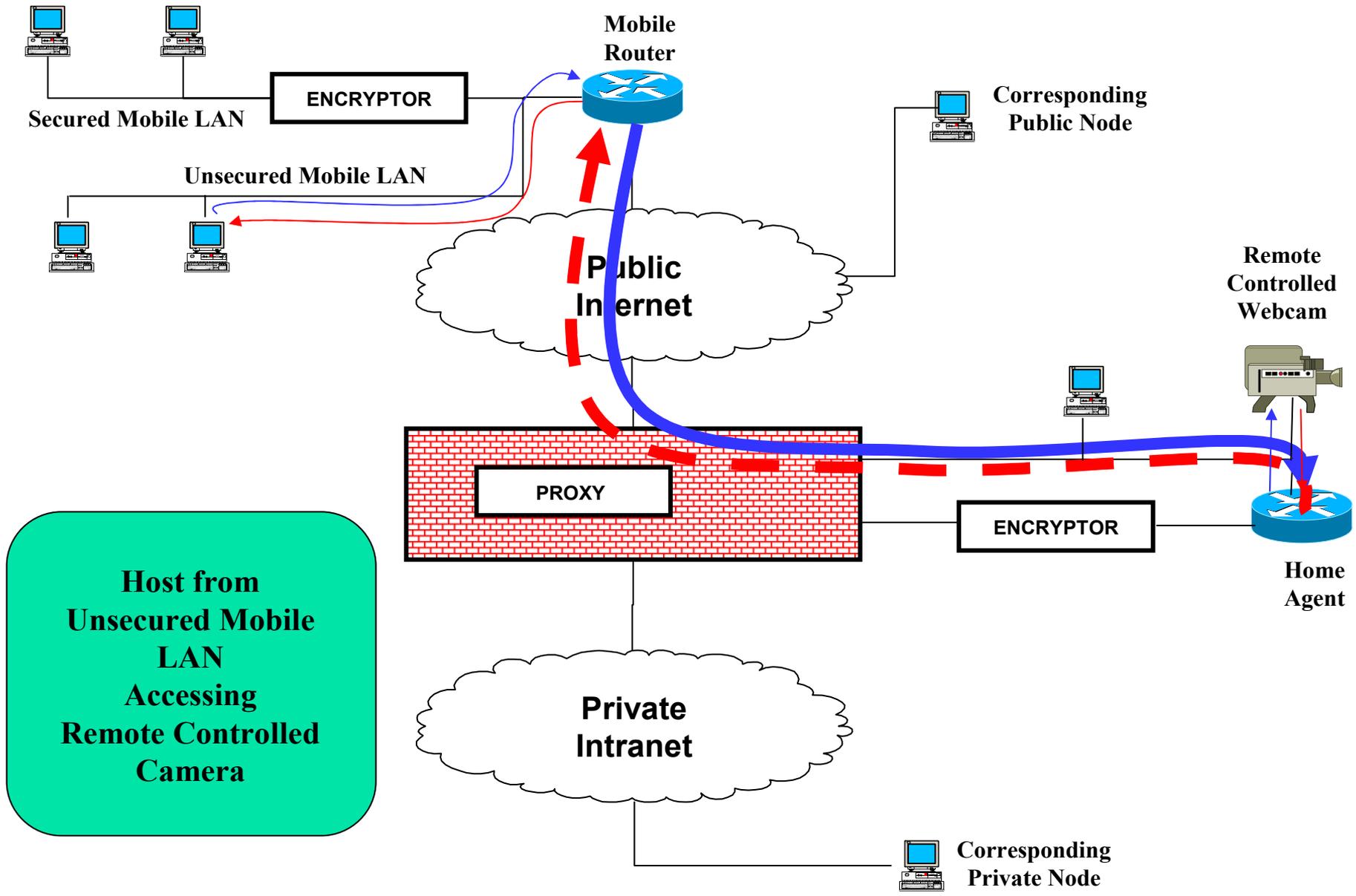
Corresponding
Public Node
Initiating
Conversation

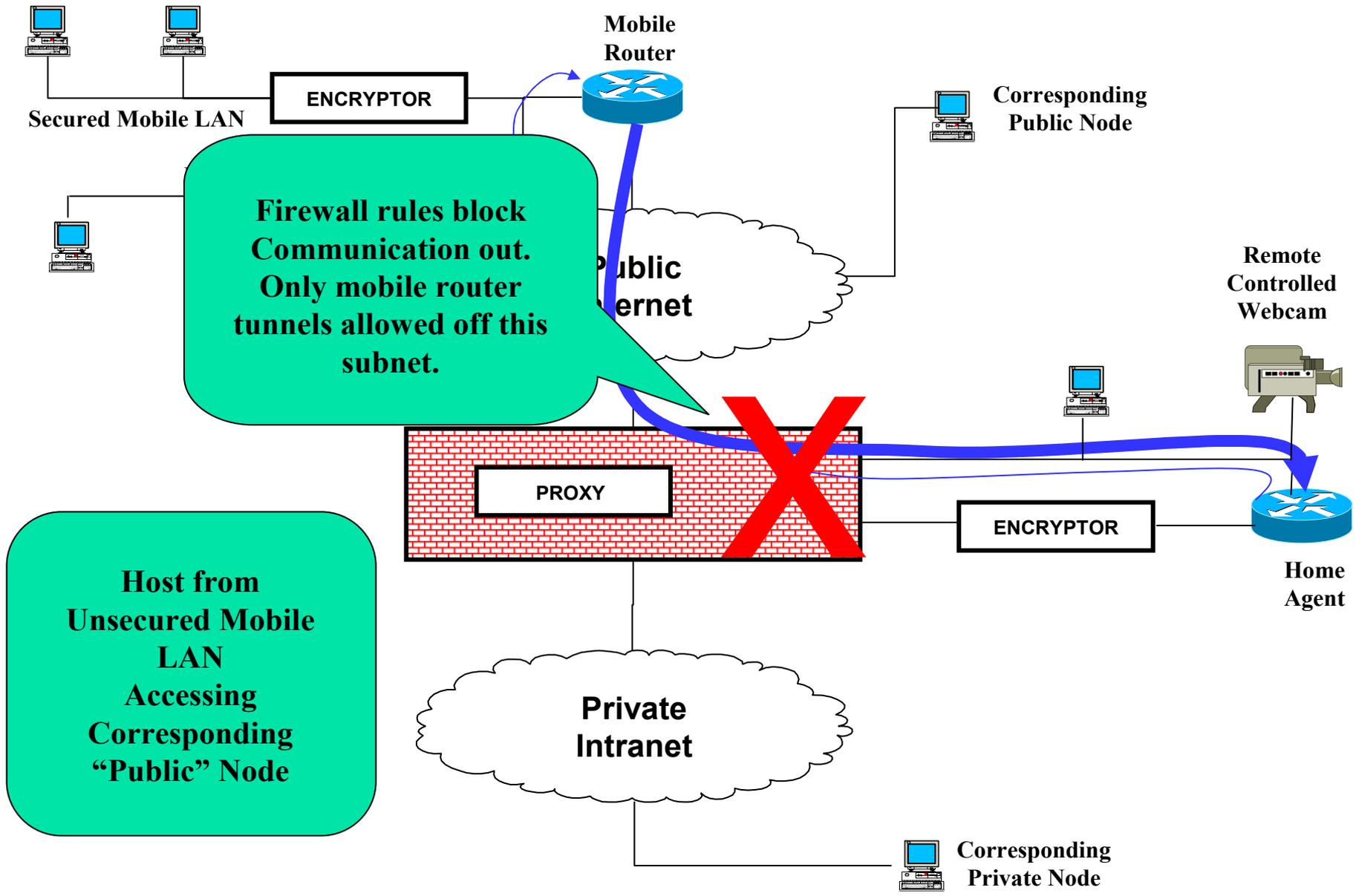


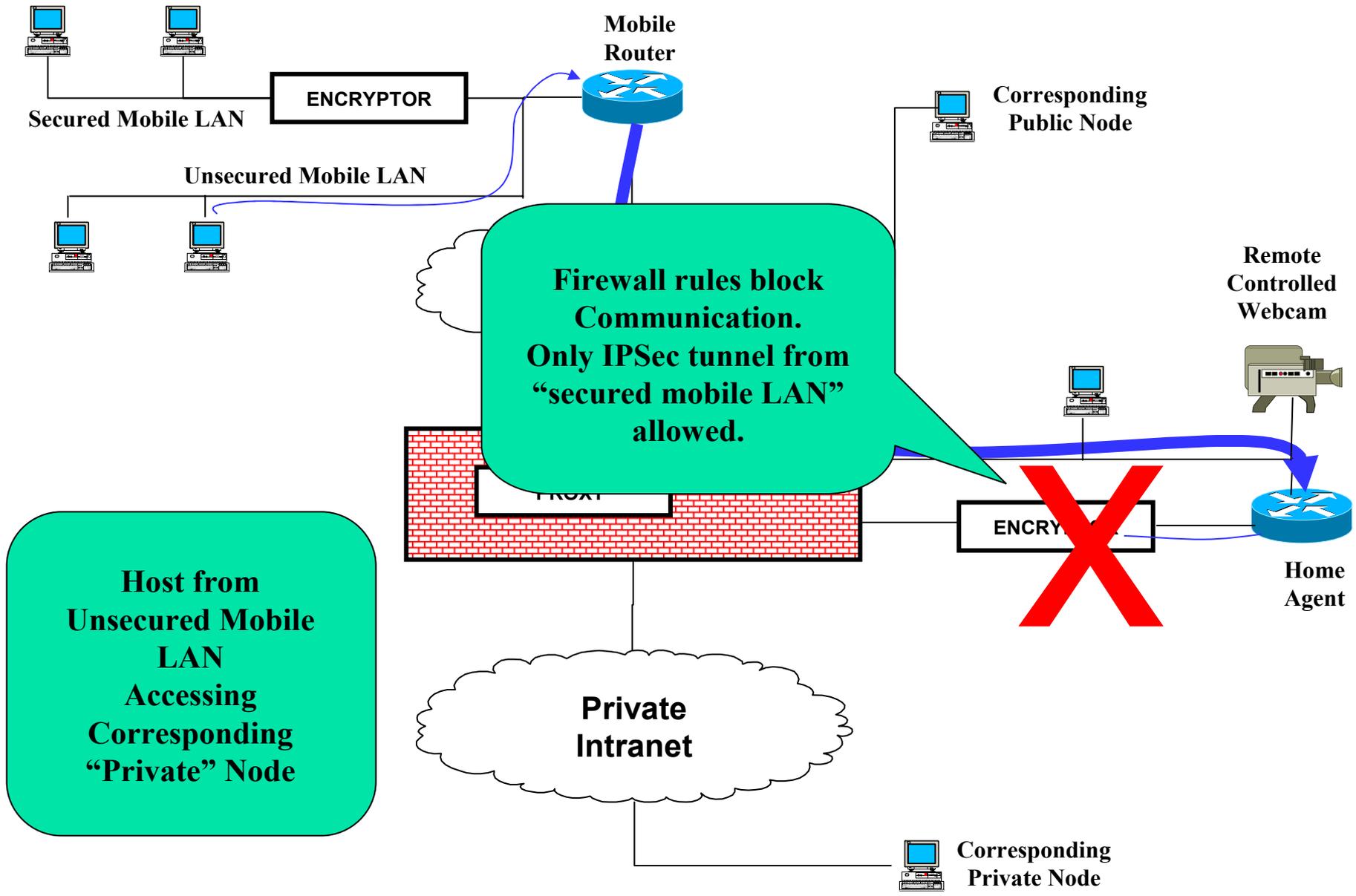
Secure Mobile LAN

Host from Secured Mobile LAN Accessing Corresponding Private Node via Internal Network

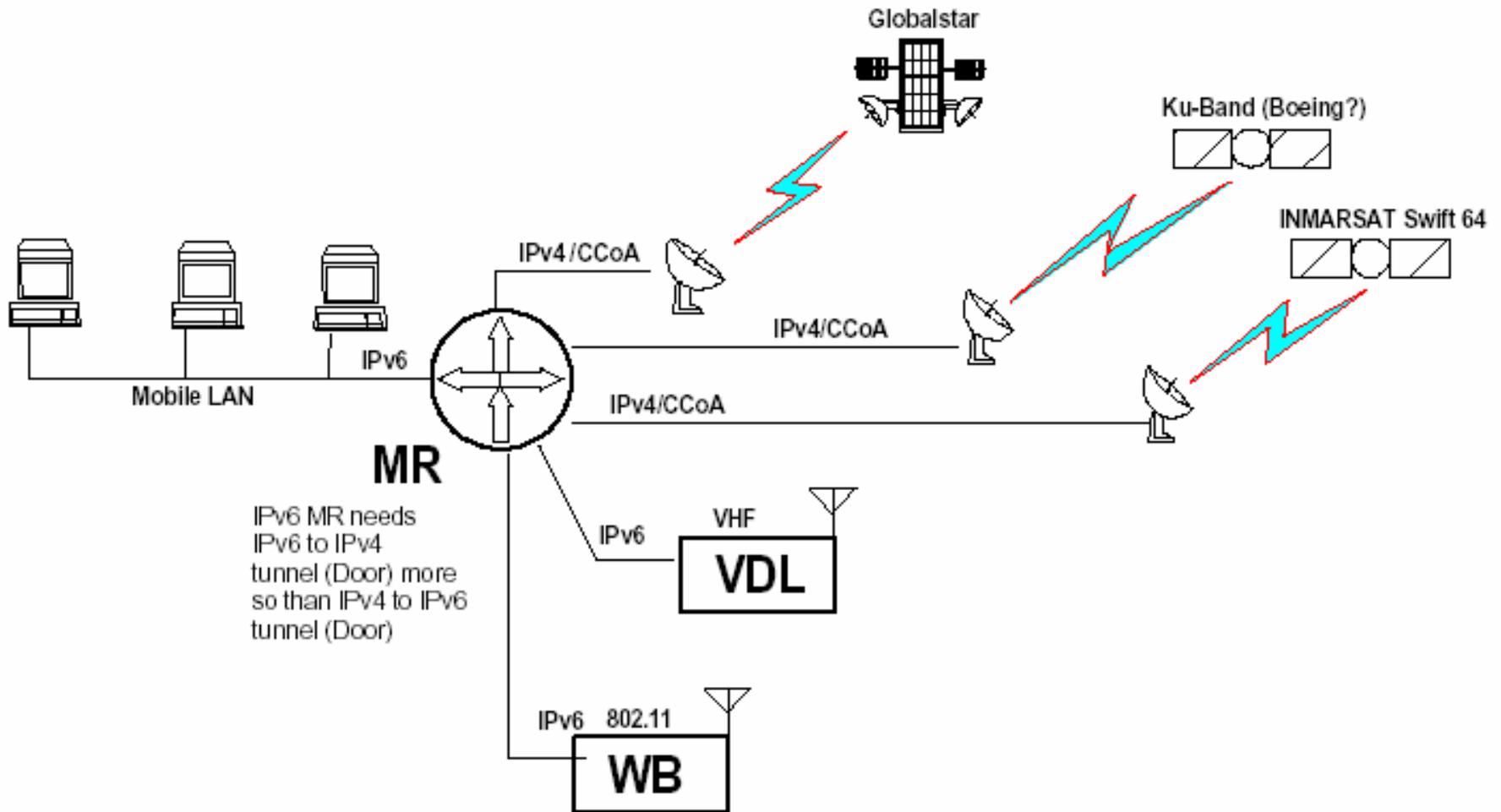




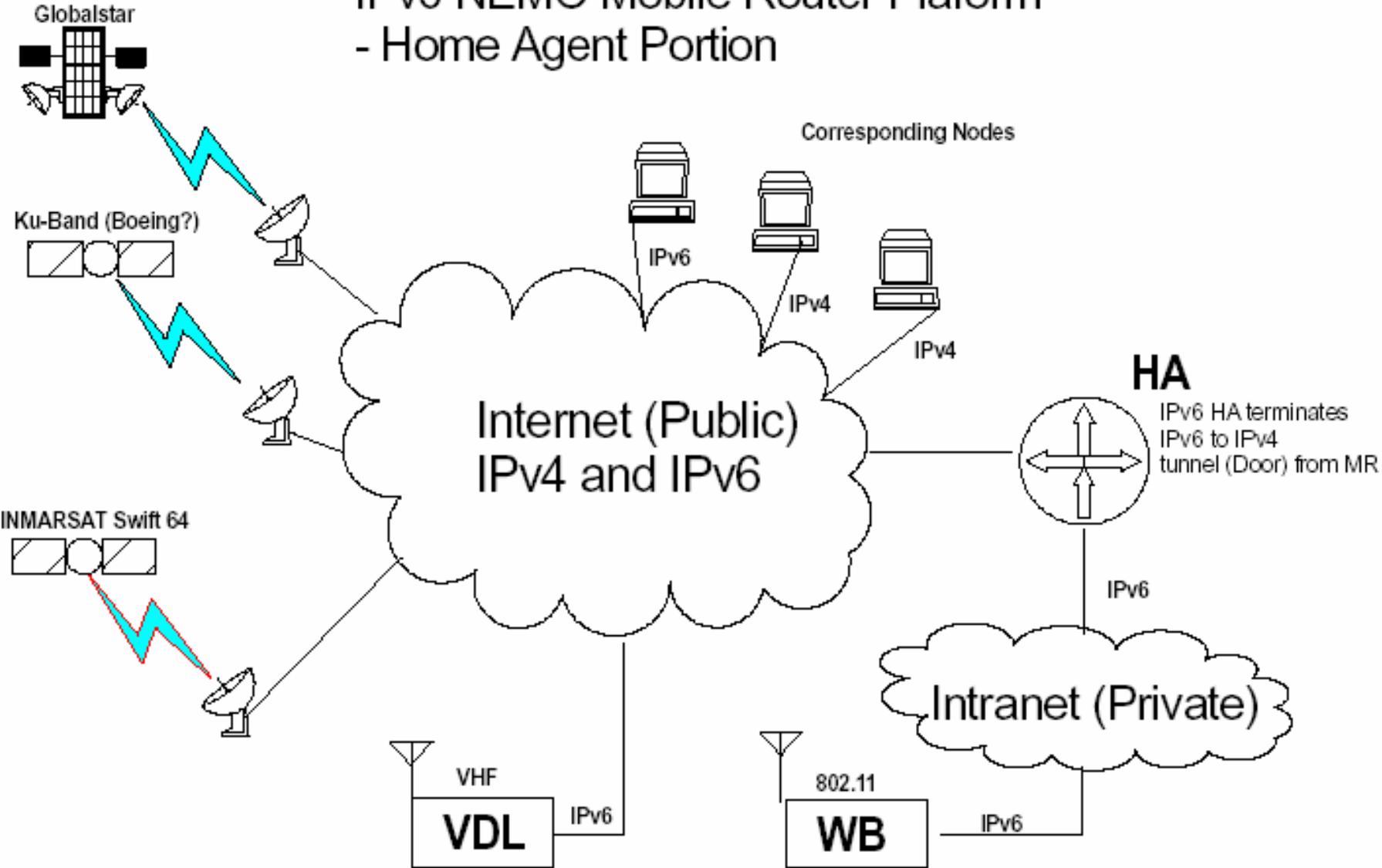


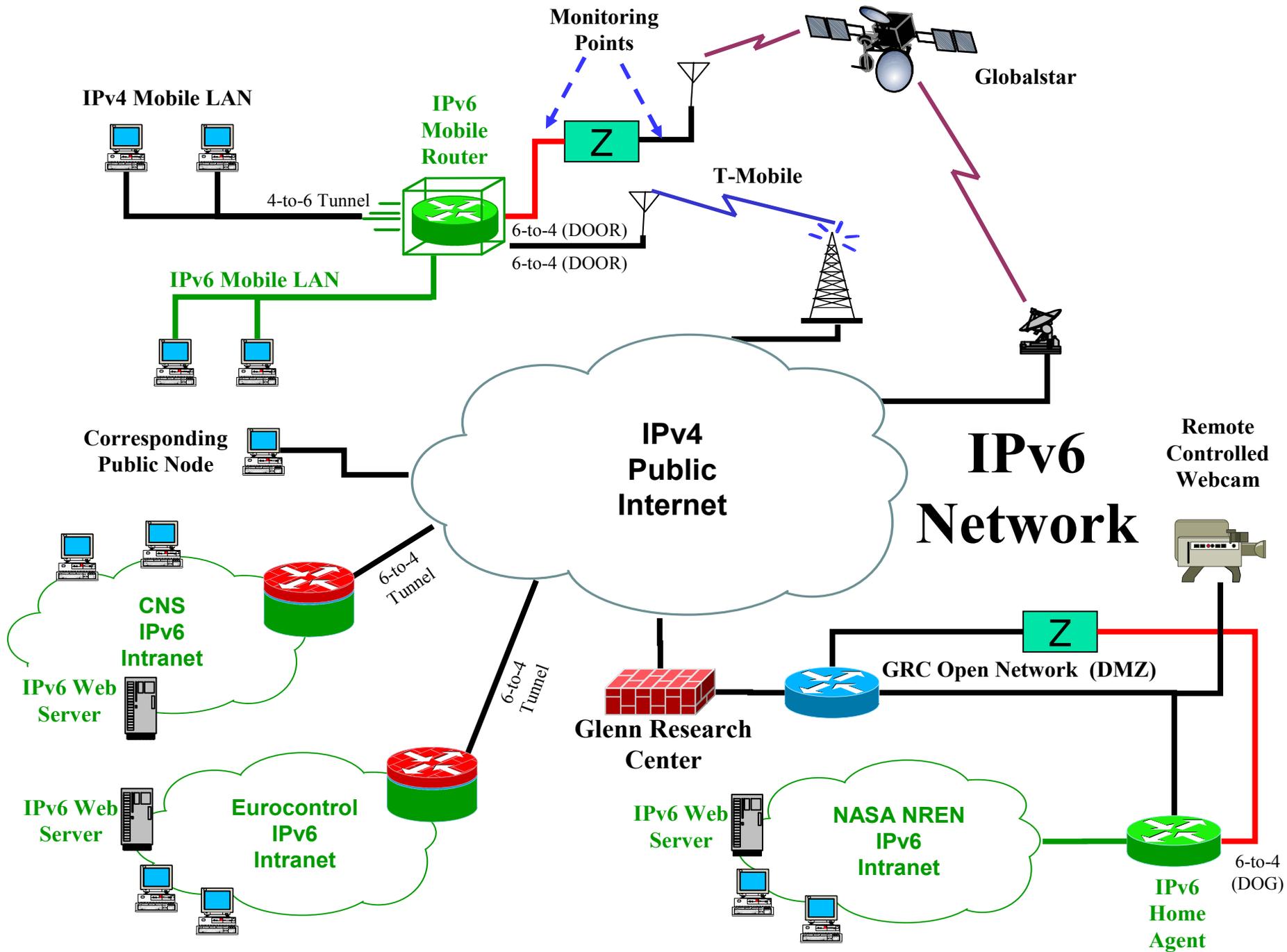


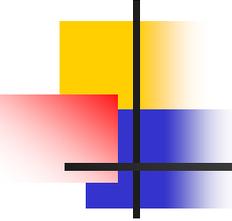
Aeronautical IPv6 NEMO Mobile Router Platform - Mobile Router Portion



Aeronautical IPv6 NEMO Mobile Router Platform - Home Agent Portion



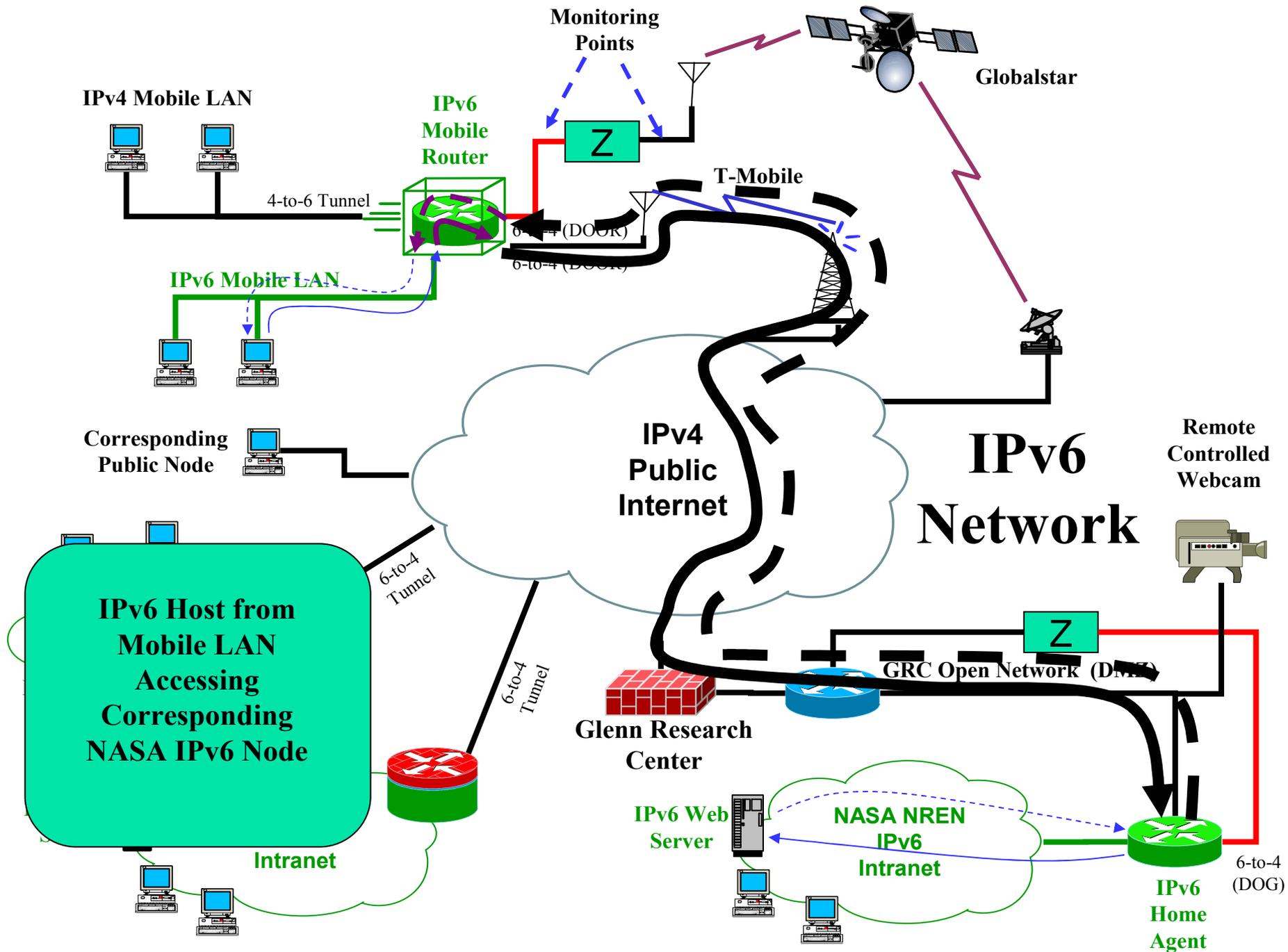


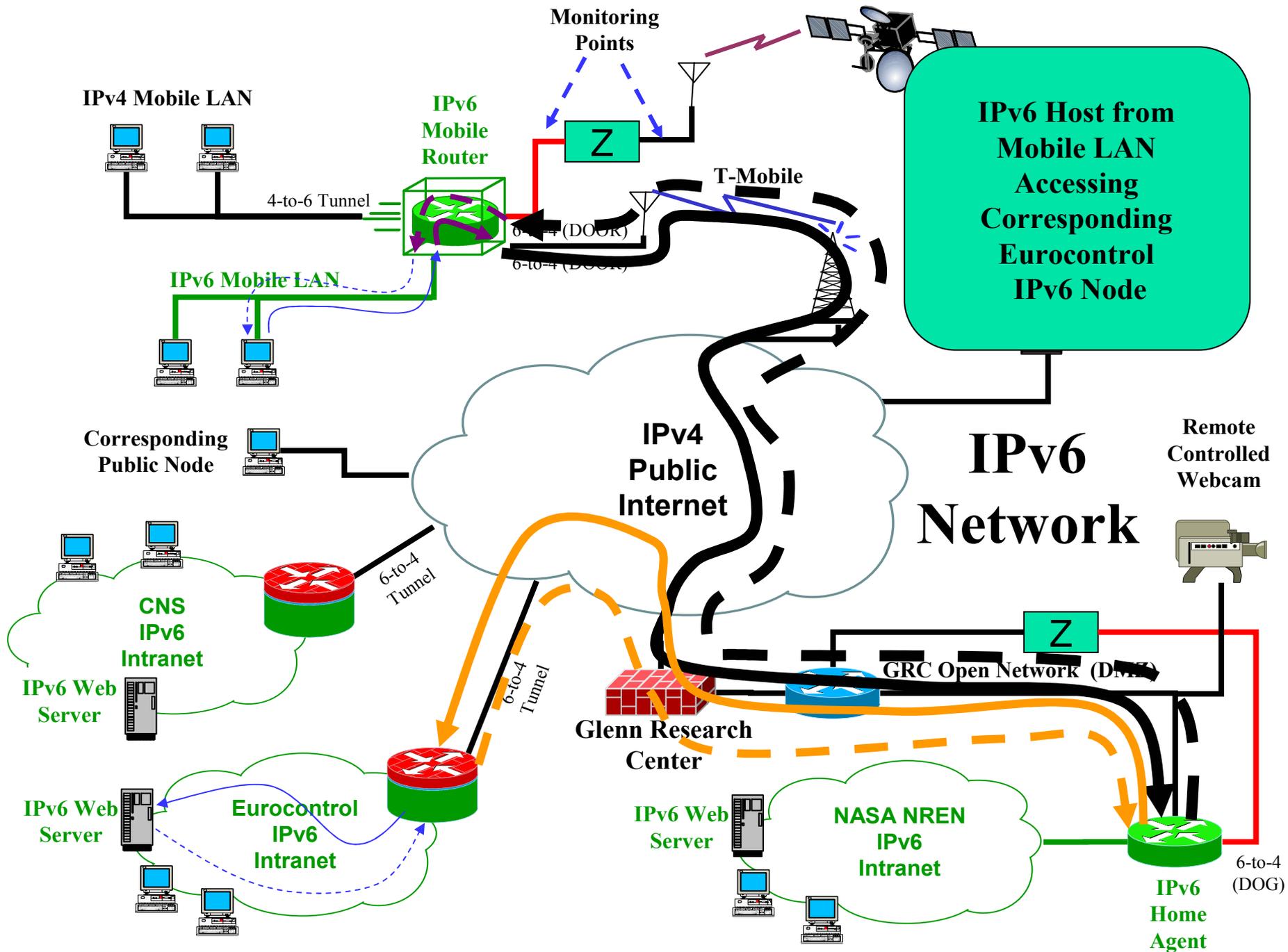


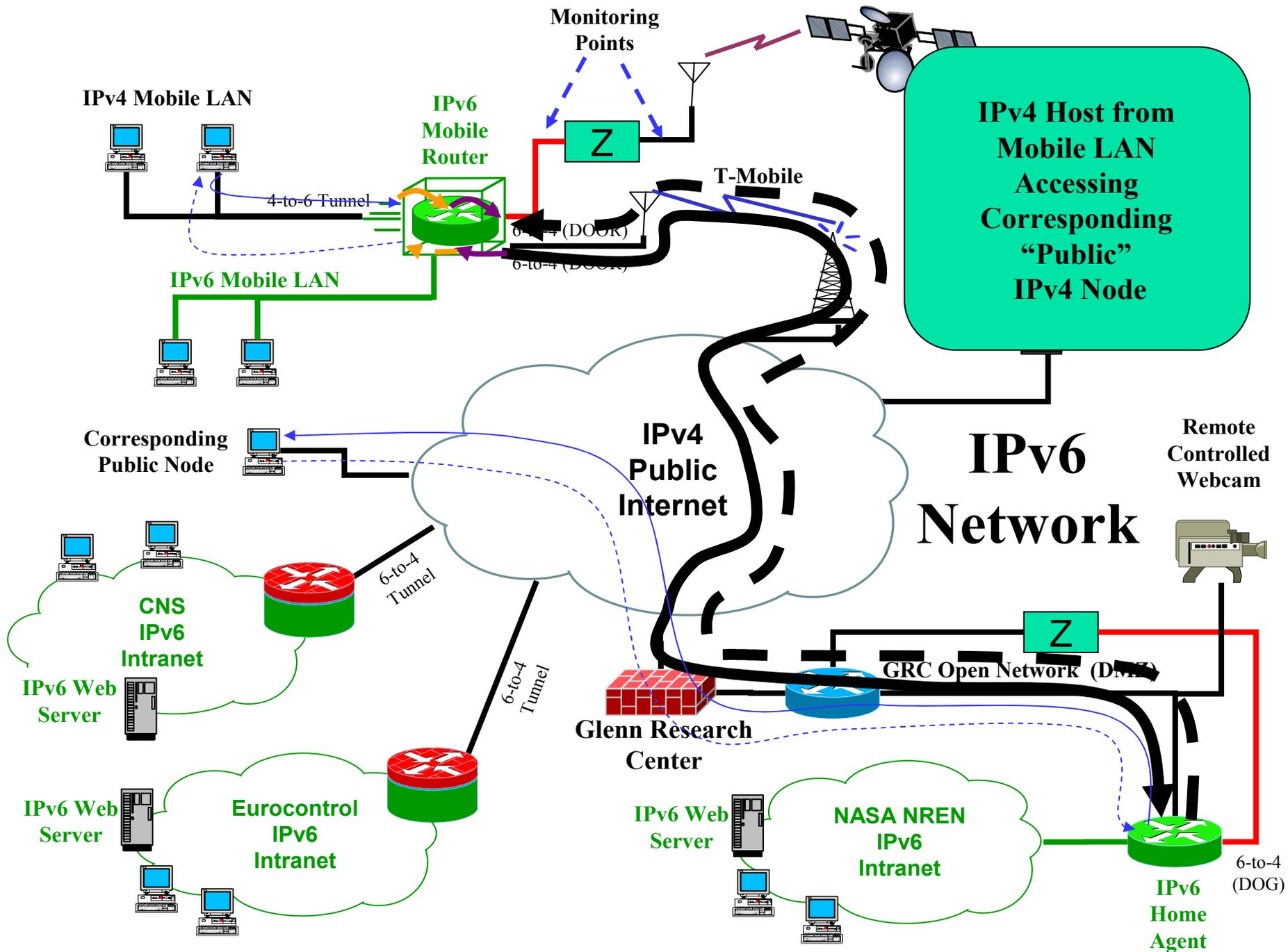
Data Flow Key

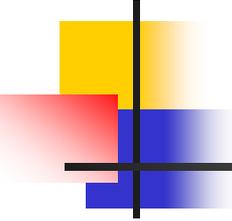
-  No Encapsulation
-  IPv6-to-IPv4 Encapsulation
-  IPv6 Mobile Router Tunnel
-  IPv6 Mobile Tunnel with IPv6-to-IPv4 Encapsulation (Double Encapsulation)
-  Encrypted IPv6 Mobile Tunnel with IPv6-to-IPv4 Encapsulation and Encryption (Triple Encapsulation)

Note, the Secured IPv4 mobile network data passing through the Globalstar network actually experiences five layers of encapsulation: 1) IPv4-to-IPv6; 2) IPv6 Mobile Tunnel; 3) IPv6-to-IPv4 "Door" tunnel; 4) HAIPE encapsulation for encryption; 5) an additional tunnel between the Globalstar Smiths Falls ground station and the Qualcomm facility in San Diego, CA unencapsulated and reencapsulated for transmission to Glenn Research Center through the NAT at Qualcomm.









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